



July 2012

INFRASTRUCTURE SPOTLIGHT: IMPROVING CANADA'S INFRASTRUCTURE THROUGH PUBLIC-PRIVATE PARTNERSHIPS

Modern, efficient and reliable public infrastructure is essential to ensuring Canadians enjoy the benefits of a strong economy, a cleaner environment and vibrant communities. Whether building new highways, water treatment facilities, or public transit, these investments help our industries reach global markets, protect our environment and support our cities and communities.

In addressing the needs of citizens, all orders of government face a myriad of challenges, including growing populations, changing trade patterns and concerns about the resiliency of our public infrastructure. New and innovative solutions are often needed to meet these challenges.

As governments expand, replace and rehabilitate Canada's public infrastructure, one increasingly popular option is partnering more with the private sector as a way to efficiently deliver infrastructure such as roads, bridges and public transit. These public-private partnerships (P3s) bring the best of both sectors to the table to deliver and provide infrastructure and services to Canadians. Under the P3 model, the infrastructure remains publicly owned, while the private sector takes on significant responsibilities and risks related to its design, building, financing, operation or maintenance. As a result, the private sector has the incentive to develop and implement innovative solutions to Canada's public infrastructure needs.

A P3 can be defined as "a long-term performance-based approach for procuring public infrastructure where the private sector assumes a major share of the responsibility, in terms of risk and financing, for the delivery and the performance of the infrastructure, from design and structural planning, to long-term maintenance."

(Source: PPP Canada)



PPP Canada

The Canadian Council for Public-Private Partnerships



Le Conseil Canadien pour les Partenariats Public-Privé

New Wastewater Treatment System for Greater Victoria, British Columbia

With work scheduled to begin this year, a new wastewater treatment system will protect the marine environment around Victoria and southern Vancouver Island

The Core Area Wastewater Treatment Program will consist of three projects: construction of the McLoughlin Wastewater Treatment Plant and Marine Outfall, upgrades to the conveyance system and a new Biosolids Energy Centre. With an estimated total capital cost of \$782.7 million, the Government of Canada will contribute up to\$253.4 million toward the entire initiative.



Artist rendering of the future wastewater treatment system (illustration courtesy of Capital Regional District)

The Biosolids Energy Centre will be delivered through a public-private partnership (P3), with support from the P3 Canada Fund. It will treat organic solid waste generated by the treatment processes at the McLoughlin Wastewater Treatment Plant.

As a P3, the Capital Regional District will maintain ownership of the facility and will be able to harness private sector innovation and ensure the best possible value for taxpayers' money.

Why Public-Private Partnerships?

Through P3s, the public sector benefits from the knowledge and experience of the private sector. By using competitive processes, P3 projects benefit from the incentives of capital markets to build public infrastructure on time and on budget, while minimizing costs over the life cycle of an asset.

Where appropriate, P3s can be an ideal solution because they:

1. Achieve Value for Money

P3s require rigorous value for money analysis and risk transfer (see table page 4). In addition, through innovation and by integrating the design, build and operation phases into a single contract, P3 projects can result in significant savings over the life cycle of an asset¹. For example, the Conference Board of Canada reports that using a P3 for the Autoroute 30 project south of Montreal is expected to save taxpayers over \$750 million.

2. Lead to on-time and on-budget delivery

P3s have been shown to deliver infrastructure on time or ahead of schedule. The private partner is typically liable for any delays and cost overruns and does not get paid until the asset is complete and performing, providing a strong incentive to the private sector to deliver in keeping with the project agreement.

¹ Traditional procurement often involves separate contracts for the various phases.

- 3. Promote cost certainty and long term asset management As P3s tend to be procured under one contract, they often require that the full cost of the capital, operating and asset refurbishment over the life of the partnership be calculated before the asset is constructed. It must be included in the overall price of the asset delivered, offering greater financial predictability and life cycle maintenance for governments.
- 4. Allocate risks to the partner best able to manage them P3s provide an opportunity for risk sharing. Risks, such as managing costs, controlling quality and staying on schedule, are transferred to the party best suited to manage them – the private sector. By contrast, in conventional public sector construction projects, risks are generally assumed by government.
- 5. Encourage Innovation Performance-based contracts and the competitive bidding process encourage innovation. The private sector partners have discretion over how they deliver the asset and compete against others to demonstrate how they offer innovative solutions to meet the public sector's needs. This leads to greater efficiencies, savings and better results, products and services for citizens.

"Public-private partnerships promise better value, timeliness and accountability for public infrastructure projects. That's exactly what the City of Winnipeg experienced with our 3.5 kilometre Chief Peguis Trail Extension. The project, including an underpass, multi-use pathway and pedestrian overpass, was completed one year ahead of schedule thanks, in large part, to this innovative approach."

Sam Katz, Mayor,
 City of Winnipeg

Chief Peguis Trail Extension, Winnipeg, Manitoba

To relieve traffic pressure on residential streets in Winnipeg, the Government of Canada contributed \$25 million through the P3 Canada Fund to extend the Chief Peguis Trail. The total capital value of the project was \$108.5 million. DBF2 Ltd was chosen to design, build, finance and maintain the roadway and structures over 25 years.

On December 2, 2011, a ceremony was held to officially mark the opening of the Trail's extension. Construction was completed approximately one-year ahead of schedule. The City of Winnipeg's Value for Money report of November 2011, showed the project achieved savings of 17.6 percent or approximately \$31 million, as compared with traditional procurement.



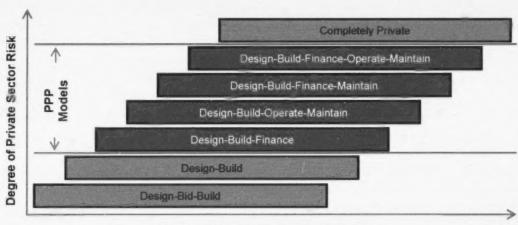
(photo courtesy of PPP Canada)

The Range of Partnerships

"P3s are increasingly moving to centre stage as an innovative vehicle for infrastructure development and service delivery. An impressive number of P3s are completed or underway across Canada involving a wide array of sectors. Canadians and their governments are seeing the many benefits: on-time and on-budget delivery, value for money, long-term cost certainty and state-of-the-art facilities that communities need. Our "Made in Canada" P3 approach is garnering international attention and offers opportunities to take our industry experience and expertise global."

- Mark Romoff, President and CEO, The Canadian Council for Public-Private Partnerships

When involving the private sector in developing infrastructure, there are a variety of options that offer increasing levels of private sector involvement and control – from traditional public procurement on one end to complete privatization² on the other. P3 projects fall in the middle of this spectrum, ensuring public ownership of the asset while engaging the private sector to design, build, finance, maintain and/or operate public infrastructure assets.



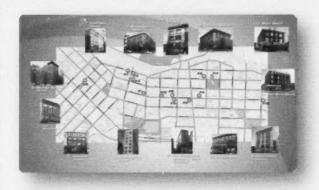
Degree of Private Sector Involvement

While P3s can vary significantly in terms of size and complexity, they are often larger projects that can attract private sector interest and financing in the marketplace. P3s have also been used for small projects. Smaller projects may be bundled to create a larger initiative that encourages private sector involvement. The Downtown Eastside Housing Renewal project in Vancouver is an example of this approach.

² The term "privatization" refers to the transfer of ownership over a public service or property to a private or non-for-profit organization.

Downtown Eastside Housing Renewal Project, Vancouver, British Columbia

Vancouver's downtown eastside faces several challenges around housing and homelessness. Through the P3 Canada Fund, the Government of Canada announced a contribution of up to \$29.1 million to renovate and restore 13 provincially-owned single-room occupancy hotels into



safe, clean, social housing units. This brownfield redevelopment infrastructure project will: reduce the number of people at risk of homelessness; improve living conditions for residents; restore the heritage features of these century old buildings; and deliver invaluable social benefits to its residents.

Once selected, the successful proponent will be required to design, build, finance, and maintain the project over 15 years.

Federal Support for P3s

Over the last decade, through various infrastructure programs such as the Building Canada Fund, the Government of Canada has been providing financial support for infrastructure projects that use the P3 approach. In 2007, the Government of Canada established PPP Canada. This Crown Corporation spearheads efforts to improve the delivery of public infrastructure through P3s, as a means of achieving value, timelines, and accountability to taxpayers. PPP Canada does this through its P3 knowledge development and sharing and through advancing federal P3s. PPP Canada also works to advance P3s in other levels of government through the \$1.2 billion P3 Canada Fund. This is the first federal infrastructure program of its kind, dedicated to funding P3 projects that target public infrastructure development undertaken by provinces, territories, municipalities and First Nations.

Autoroute 30, Vaudreuil-Dorion to Candiac, Quebec

To ease increasing congestion and interprovincial traffic, the new, 42-kilometre Autoroute 30 south of Montréal, is under construction. It will divert traffic along the south shore of the St. Lawrence River. The new Autoroute will also provide a more direct route for Ontario and Québec City bound traffic, relieving congestion in Montréal's downtown core and significantly improving transportation in the region.

Infrastructure Canada is contributing \$704.5 million to this project, which employs a design-build-finance-operate-maintain P3 model.



(photo courtesy of the ministère des Transports du Québec)

Canada Takes the Lead

Canada is internationally recognized as a leader in P3s, and overseas markets seek Canadian expertise in developing P3s³. Canada's experience with P3s has grown rapidly as a result of projects across the country using the P3 model to procure elements of their public infrastructure. By focusing on assets within their core area of responsibility such as hospitals, schools and roads, several provinces have shown that P3s are an important tool for delivering essential services.

Since the early 1990s, there have been over 100 P3 projects (completed, under construction or in procurement) in jurisdictions across Canada. The chart below details the size of the Canadian P3 market between 2005 and 2011. The main sectors adopting P3s have been in healthcare (40%), followed by transportation (21%)⁴.



(Source: PPP Canada)

"Canadian governments and companies are now global leaders in the implementation of P3s. They are also leaders in adapting the model to emerging market opportunities. Today, provinces and municipalities are contemplating P3s for a range of new core infrastructure assets such as water distribution networks, wastewater treatment facilities, and economic infrastructure such as roads, bridges, transit, and tourism infrastructure. P3s are the way of the future for infrastructure projects and our industry welcomes the opportunity to support Canada's continued growth through this fixed-price, performance-guaranteed, accountable approach to infrastructure delivery."

- Mike Marasco, CEO Plenary Investments, Plenary Group

Canada's leadership in P3s has created an economic development opportunity for the country, as the transparency and efficiency of our P3 approach has been applauded by international audiences.

³ Urban Land Institute and Ernst & Young. Infrastructure 2012: Spotlight on Leadership. Washington, D.C.: Urban Land Institute, 2012.

⁴ PPP Canada (2011), Canadian and International P3 Marketplace from 2009 to 2011: Market Evolution, Current Status and Future Trends.

"PPPs have probably never been higher on the agendas of governments around the world. In discussions on what model countries might follow, many experts suggest Canada as a model of good governance in PPP. This offers opportunities for Canadians to export their knowledge and practises internationally."

- Geoffrey Hamilton, Chief, Cooperation and Partnerships Section, United Nations Economic Commission for Europe (UNECE)

Southeast Calgary Stoney Trail Ring Road, Alberta

To improve traffic efficiencies, streamline shipping routes and lower collision rates in the southeast region of Calgary, the Government of Canada is investing \$100 million through the Building Canada Fund to extend the southeast section of a ring road around Alberta's largest city.

Workers have begun construction on a 25-kilometre long section of a six-lane roadway, due to be completed by the fall of 2013.

The Southeast Stoney Trail project is managed through a P3 that provides incentives for finishing work on time and on budget.



Looking Forward: The Future of P3s in Canada

In Budget 2011, the Government of Canada committed to working with provinces, territories, the Federation of Canadian Municipalities and other stakeholders to develop a long-term plan for public infrastructure that extends beyond the expiry of the Building Canada Plan in 2014. In November 2011, the Minister of Transport, Infrastructure and Communities launched a formal engagement process towards the development of this new long-term plan.

P3s have become a common tool for building infrastructure and offer many benefits. As the Government of Canada looks to the future, partnering with the private sector will continue to be considered where such arrangements generate value for taxpayers and offer an innovative solution to meeting the public infrastructure needs of large and small communities across Canada.

For more information on the Government of Canada's Engagement Process for the development of a Long-Term Infrastructure Plan, visit: http://www.infrastructure.gc.ca.

Infrastructure Spotlight: Improving Canada's Infrastructure through Public-Private Partnerships ©Her majesty the Queen in Right of Canada, July 2012

Cat. No. T94-5/6-2012E-PDF

ISBN 978-1-100-21082-7

This document and additional information are available on the Web at www.infrastructure.gc.ca. Cette publication est également disponible en français : L'accent sur l'infrastructure : Améliorer les infrastructures du Canada grâce aux partenariats public-privé.